



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/020,699 02/09/98 SLATER

R 7204

TM02/0731

EXAMINER

MICHAEL CHAN
NCR CORPORATION LAW DEPARTMENT
INTELLECTUAL PROPERTY SECTION ECD2
101 WEST SCHANTZ AVENUE
DAYTON OH 45479-0001

EL MORE R	
ART UNIT	PAPER NUMBER

2187
DATE MAILED:

07/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

BEST AVAILABLE COPY

SMA



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. ²¹~~20~~

Application Number: 09/020,699
Filing Date: February 09, 1998
Appellant(s): SLATER ET AL.

MAILED

JUL 3 1 2001

Technology Center 2100

Gregory A Welte
Reg. No. 30,434
NCR Corporation
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed May 11, 2001.

(1) *Real Party of Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of the Claims*

The statement of the status of the claims contained in the brief is correct. The appeal involves claims 14-16.

(4) *Status of Amendments After Final*

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows: the after final amendment has not been entered. Reasons for the non-entry of the after final amendment are given in the Advisory Action which has been mailed to the appellant. The after final amendment does not affect the issues under appeal.

(5) *Summary of the Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is not correct. There are no objections under 35 USC 112 in the office action. These are drawing objections and are not subject to determination by the Board of Patent Appeals and Interferences.

Art Unit: 2187

(7) *Grouping of the Claims*

Appellant's brief includes a statement that claims 14-16 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims under Appeal*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of the claims under appeal.

4,801,787	SUZUKI	1-1989
5,883,377	CHAPIN, Jr.	3-1999

(10) *Grounds of the Rejection*

Claims 14-16 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 16. The rejection is as follows:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki.

Suzuki teaches the claimed invention (claim 14) substantially as claimed including a method of determining validity of a transaction carried out by a user at a data processing system, the method including the steps of:

- a. accepting a user identification card from a party is taught as an IC card (e.g., see col. 1, lines 25-38);
- b. reading first and second data from the card is inherently taught;
- c. prior to asking for any other identity data, presenting a message asking the party to enter the first data is notoriously well known as requesting a PIN in the ATM art and official notice is taken thereof;
- d. comparing the first entry of data against a first stored field of security data is taught as determining the validity of the entered PIN (e.g., see Figure 3 and col. 3, lines 3-12); and,
- e. comparing the second data entered with the second data read from the card and if they agree, proceeding with the transaction is taught as doing the comparison of the addition personal data supplied by the card owner (e.g., see col. 2, lines 25-49).

Suzuki teaches the above listed details of the claim 14, however, Suzuki does not teach using the second data as an additional means of identification but as a means of the card owner still having access when the PIN has been forgotten or incorrectly typed. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this second data as a further identification means for security purposes to insure against misuse of an IC card without incurring significant requirements for either additional hardware or software.

As to claim 16, Suzuki teaches suspending the transaction if there is lack of agreement between the entered data and the stored data (e.g., see Figure 3).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Chapin, Jr. et al.

Suzuki teaches the independent claim 14 as shown above.

As to claim 15, Suzuki does not teach the first and second data on the card being encrypted, however, Chapin, Jr. teaches the encryption of data on a transaction card (e.g., see the abstract and col. 3, lines 8-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the encryption of the data on the card with the invention as taught by Suzuki because this provides additional security and thereby prevents possible misuse of the card. It would be reasonable to combine these references particularly in light of Suzuki stating the data is 'coded' which indicates more than direct storage of data (e.g., see col.1, line 56 to col. 2, line 11).

(11) Response to Argument

Appellant argues that the Suzuki requires only one piece of data, however, the reference clearly uses two pieces of data to access the account attached to the card. The argument appears to be based on the use of the two pieces of data. The first piece of data is the PIN and in both the claimed invention and the reference a second piece of data is personal information related to the card owner. The rejection is an obvious type rejection, which sets out that in light of the use of two pieces of data, as given in the reference the use of the second piece of data being used as a further means of identification for better security in using the card is rendered obvious. The hardware is already available and the use of the second piece of data for security is clearly within the level of one of ordinary skill in the art. Also, the user of the card in the invention as taught by Suzuki shows it requires two pieces of personal data to then access the card once the PIN has

been forgotten. This provides motivation for two pieces of data being used for security purposes in accessing the card.


As to the arguments in relationship to claim 16, the office action refers the appellant to Figure 3 of the reference to a teaching of suspending the transaction if there is a lack of agreement between the entered data and the stored data. Figure 3 is a flowchart. At S2 the first comparison is made for determining whether or not the PIN has been entered correctly. If it has the user is allowed access. If the PIN is not correct for 4 retries the RT +1 function equals 5 and the display will show 'ERROR' and the user is given one more retry to correctly enter the PIN. If the retry is also incorrect and doesn't match the stored value the display shows the PIN is invalid and invalidates the card or in effect suspends the operation. If the user decides not to retry the PIN one last time when given that option the display will show 'BIRTHDAY?' and the user then inputs the birthday of the owner of the card. If the birthday typed in by the user matches the stored value a second piece of information is requested -- 'TEL?'. The card owner keys in the home telephone number and if the correct value has been typed in the screen will show 'OK' and the user is determined to be a valid user of the card. If the birthday and telephone number are not typed in correctly even after a specific number of retries the display shows 'INVALID' and the card is invalidated and the use of the card is suspended. This flow chart teaches the suspension of the card to the extent claimed. This flow chart and the analysis given in the specification also give motivation for using two separate pieces of information for security purposes in using transaction cards.

As to the arguments concerning claim 15 and the combining of the Chapin reference with that of the primary reference Suzuki, the combination of the references teach using encrypted



Art Unit: 2187


data on a transaction (credit) card and then decrypting the information for using the card. The combination of references is meant to show that encrypting and decrypting security data for using a transaction card is known in the art and such a tool for added security is within the skill level of one of ordinary skill in the art at the time of the present invention. The Suzuki reference does not detail using encrypted data but does teach using coded data as well as more than one piece of data for security type purposes. The Chapin reference teaches using encrypted data in relationship to security for transaction type cards and the combination teaches using encrypted data with the additional multiple pieces of data for even further security. Both references are directed toward the security of transaction type cards of some type even if in the case of Suzuki the security is a teaching of the owner having an additional level of data to use to prevent the card being improperly invalidated when the owner or user of the card forgets the PIN. Additionally, the present application does not teach any algorithms for either encrypting or decrypting data on a card but only claims this limitation. The appellant must depend upon the skill in the art for one of ordinary skill for this limitation to be enabling in the present invention. This limitation is taught to the extent claimed.

Respectfully Submitted,

Reba I. Elmore 
Primary Patent Examiner
Group 2100

NCR Corporation
101 West Schantz Avenue
ECD-2
Dayton, OH 45479


JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



DO HYUN YOO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
As a conferee